

# UNITED STATES DEPARTMENT OF COMMERCE

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FILING DATE FIRST NAMED INVENTOR APPLICATION NO. ATTORNEY COCKET NO. 09/505,713 02/17/00 JUD W Г **EXAMINER** IM22/1207 Fisher Christen & Sabol JACKSON, M 1725 K Street NW PAPER NUMBER ART UNIT Suite 1401 Washington DC 20006 1773 DATE MAILED: 12/07/00

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 

	Application No.	Applicant(s)
Office Action Summary	09/505,713	JUD ET AL.
	Examiner	Art Unit
	Monique R Jackson	1773
The MAILING DATE of this communication appe	ars on the cover sheet with the c	1
Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.		
<ul> <li>Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.</li> <li>If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.</li> <li>If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.</li> <li>Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).</li> <li>Status</li> </ul>		
1) Responsive to communication(s) filed on		
2a)☐ This action is <b>FINAL</b> . 2b)⊠ This action is non-final.		
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims		
4)⊠ Claim(s) <u>15-31</u> is/are pending in the application.		
4a) Of the above claim(s) is/are withdrawn from consideration.		
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>15-31</u> is/are rejected.		
7) Claim(s) is/are objected to.		
8) Claims are subject to restriction and/or election requirement.		
Application Papers		
9)☐ The specification is objected to by the Examiner.		
10) The drawing(s) filed on is/are objected to by the Examiner.		
11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved.		
12) The oath or declaration is objected to by the Examiner.		
Priority under 35 U.S.C. § 119		
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).		
a)⊠ All b)☐ Some * c)☐ None of the CERTIFIED copies of the priority documents have been:		
1.⊠ received.		
2. received in Application No. (Series Code / Serial Number)		
3. received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).		
* See the attached detailed Office action for a list of the certified copies not received.		
14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).		
Attachment(s)		
<ul> <li>15) Notice of References Cited (PTO-892)</li> <li>16) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>17) Information Disclosure Statement(s) (PTO-1449) Paper No(s)</li> </ul>	19) Notice of Informal	y (PTO-413) Paper No(s) Patent Application (PTO-152)

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### Claim Rejections - 35 USC § 112

- The following is a quotation of the second paragraph of 35 U.S.C. 112:
   The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 2. Claims 15-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 15 recites the limitation "the form of a metal foil" in line 2, and "the form of a plastic film" in line 10. There is insufficient antecedent basis for these limitations in the claim. It is also noted that claims 15 and 22 recite the limitation "the polyester, polyamide, or polyolefin type" in lines 6-7 and 3-4, respectively. There is insufficient antecedent basis for this limitation in the claim. Further, it is unclear what the term "type" encompasses. Lastly, claim 15 recites the limitation "the coextrusion coated, coextruded and/or extrusion laminated polyamide/polypropylene type" in lines 10-12. This limitation is unclear and lacks antecedent basis in the claim.
- 3. Claims 16-17, 19-21 and 23-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 16 recites the limitations "the free surface" of "the first layer of bonding agent" on lines 4-5. There is insufficient antecedent basis for these limitations in the claim. Further, it is noted that the term "lies over" is unclear for a first layer may "lie over" a second layer via a third intermediate layer placed between the first and second layers.
- 4. Claims 17-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims recite the limitation "layer type structure" in line 2 of claims 17-25. Itt

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is unclear what the term "type" encompasses. Further, claims 17, 19, 20 and 25 recite the limitation "a layer type structure with one layer superimposed over the other comprising ...polypropylene." Considering there is no clear indication of which layer comprises what, ie. utilizing "/" to clear differentiate the different layers, it is unclear from this limitation how many layers are present and what each layer comprises.

- 5. Claim 17 is further rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 17 recites the limitations "the free side" of "the coextruded bonding agent layer" in line 5. There is insufficient antecedent basis for these limitations in the claim. Further, it is noted that the term "bonded agent" in line 3 is unclear.
- 6. Claim 18 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 18 recites the limitation "laminate adhesive and laminate bonded a polyamide/bonding agent/polypropylene film" in lines 3-4. It is unclear what is meant by "bonded a".
- 7. Claim 19 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 19 recites the limitation "the first extruded bonding agent layer" in lines 4-
- 5. There is insufficient antecedent basis for this limitation in the claim. Further, it is unclear what is meant by the term "laminated bonded polyamide film" in line 3.
- 8. Claim 20 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as

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the invention. Claim 20 recites the limitation "the first bonding agent" in line 4. There is insufficient antecedent basis for this limitation in the claim.

- 9. Claim 24 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 24 recites the limitation "comprising laminate adhesive and laminate bonded a film of" in line 3. It is unclear what the term "bonded a" means. Claim 24 also recites the limitation "the laminate adhesive layer" in line 5. There is insufficient antecedent basis for this limitation in the claim. Further, it is noted that Claim 24 recites that "layer(c) lies on the laminate adhesive layer on the metal foil" however Claim 24 is dependent on Claim 21 which is dependent on Claim 16 which recites that "layer(c) lies over the free surface of the first layer of bonding agent." Therefore, it is unclear whether the Applicant meant for Claim 24 to be dependent on Claim 21 or Claim 22 which also includes the additional polypropylene layer.
- 10. Claim 25 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 25 recites the limitation "the first polypropylene layer" in lines 4-5. There is insufficient antecedent basis for this limitation in the claim.
- 11. Claim 27 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 27 recites the limitation "wherein between ... a laminate adhesive is provided in an amount from 0.5 to 10g/m², or a bonding agent with a thickness of 0.5 to 15μm" in lines 1-4. It is unclear from this limitation whether "or a bonding agent" is provided between the plastic layer and the metal foil layer or what exactly the "or a bonding agent" limitation is

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referring to. The Examiner suggests rearranging the terms to read "wherein between...a laminate adhesive in an amount from 0.5 to  $10g/m^2$  or a bonding agent with a thickness of 0.5 to  $15\mu m$  is provided."

- 12. Claim 28 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 28 recites the limitation "the laminate adhesive" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.
- 13. Claims 29 and 31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 29 and 31 recite the limitation "pouch type" in line 1. It is unclear what the term "type" encompasses.
- Claim 30 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite in that it fails to point out what is included or excluded by the claim language. Claim 30 recites "A method comprising making the sterilizable composite film of Claim 15." However, it provides no method steps or indication as to how the sterilizable composite film is made. This is an omnibus type claim.
- 15. Claim 31 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for in that is fails to point out what is included or excluded by the claim language. Claim 31 recites "A method comprising making the pouch type of packaging of Claim 28. However, it provides no method steps or indication as to how the packaging is made. This claim is an omnibus type claim.

## Claim Rejections - 35 USC § 102

16. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 17. Claims 15-20 are rejected under 35 U.S.C. 102(a) as being anticipated by the admitted prior art. The admitted prior art on page 1 of the specification teaches a sterilisable composite film employed in the manufacture of pouches for packaging foods comprising a four layer composite film with one layer after another of a polyester film, an aluminum foil, an oriented polyamide film and a polypropylene film. Each of the four layers is joined to the neighboring layers by means of an adhesive and/or primer. Considering extrusion, coextrusion and coextrusion coating are conventional processing steps in fabricating multilayer laminates and do not change the material composition or structure of the final product composite, the admitted prior art anticipates the above cited claims of the instant invention.
- 18. Claims 15-20, 22, 25, 27 and 29-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Misasa et al (USPN). Misasa et al teach a laminated material useful for packaging materials for foodstuffs that has superior gas barrier properties, light shielding properties and moisture resistance (Abstract.) The laminate comprises an inner layer of polyolefin such as polypropylene (A); a second gas barrier layer consisting essentially of a saponified product of ethylene-vinyl acetate copolymer, polyester resin, or polyamide resin (B); a third metal layer such as aluminum (C); and a fourth outer layer such as polyester resin like PETP (Claim 1; Col.

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2, lines 12-18; Col. 2, lines 51-56; and Col. 3, lines 24-40.) In producing the laminated material, it is preferred to employ a process in which a laminated material of layers A and B and a laminated material of layers C and D are previously produced and the two laminated materials are then laminated to each other (Col. 4, lines 10-14.) The laminate can be formed by bonding the layers together by any suitable procedure such as extrusion lamination or dry lamination using an adhesive coating or primer (Col. 3, line 51 – Col. 4, line 9; and Examples.) The amount of adhesive coated is from 2 to 10 grams per square meter and preferably between 1.5 and 8 grams per square meter (Col. 3, lines 67-Col. 4, line 2.) Between layer B and C may be interposed if necessary a suitable layer of a synthetic resin such as polyethylene or polypropylene (Col. 3, lines 2-24.) The laminate can be sterilized and used as a food packaging material or to form containers for packaging foods (Col. 3, lines 60-64; and Col. 4, lines 41-44.) Considering extrusion, coextrusion and coextrusion coating are conventional processing steps in fabricating multilayer laminates and do not change the material composition or structure of the final product composite, Misasa et al anticipates the above cited claims of the instant invention.

19. Claims 15-20, 22, 25 and 29-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Ito et al (USPN 4,291,085.) Ito et al teach a packaging material for food to be subject to sterilization which comprises a flexible laminate sheet including a heat-sealable inner layer of polypropylene (a), an aluminum foil intermediate layer (c), an outer layer of heat-resistant thermoplastic or thermosetting resin such as the polyester PETP or a biaxially oriented film (b), one or more impact-absorbing layers between (a) and (c) or (b) and (c), and if necessary, adhesive or primer layers interposed between every two adjacent layers (Abstract; Col. 3, lines 35-45; Col. 4, lines 17-35; Col. 7, line 65 – Col. 8, line 18.) The impact-absorbing layer is a

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thermoplastic resin having the desired impact properties such as stretched or unstretched polyamides or copolyamides, or stretched polypropylene having the desired impact absorbing coefficient and a melting point higher than the melting point of the polypropylene of (a) (Col. 9, lines 55-60; Col. 10, lines 34-36.) The packaging laminate can be formed into bags for food packaging with the layer thickness selected to produce a laminate with the desired properties, with a preferred thickness of 10-50µm for the outer layer, 10-50µm for the oxygen barrier layer or 5-20µm for the aluminum foil layer, and 30-100µm for the heat-sealable polypropylene layer (a) and 5-40µm for each impact-absorbing layer (Col. 12, lines 7-36.) Considering extrusion, coextrusion and coextrusion coating are conventional processing steps in fabricating multilayer laminates and do not change the material composition or structure of the final product composite, Ito et al anticipates the above cited claims of the instant invention.

20. Claims 15-20, 22, 25, 27 and 29-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Heyes et al (USPN 5,079,052.) Heyes et al teach a laminated metal sheet having adhered to one of its major surfaces a composite co-extruded polyolefin-containing film (B) comprising a plurality of layers in the following order: (B1) an inner layer of a bonding resin, (B2) a layer of a polyamide, (B3) a further layer of a bonding resin, (B4) a layer of a polyolefin (Abstract.) The composite further comprising a film (A) of a thermoplastic polymer adhered to the other major surface of the metal sheet where A is typically a composite polyester, polyamide or polyolefin film (Col. 3, lines 41-46.) Layer (B4) is most preferably polypropylene or ethylene/propylene copolymer with a thickness of 10-200μm (Col. 2, lines 22-27.) Layer (B2) is a polyamide with a thickness less than 10μm (Col. 2, lilnes 15-18.) Layers (B1) and (B3) are bonding resin layers with a thickness of 1-10μm and are preferably based on polyethylene or

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polypropylene (Col. 3, lines 27-33.) The composite layer B may be formed by coextrusion (Col. 4, lines 57-58.) The laminated sheet is particularly useful as a packaging material such as for food cans (Col. 6, lines 60-64.)

### Claim Rejections - 35 USC § 103

- 21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 22. Claims 15-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art as applied to claims 15-20 above. The teachings of the admitted prior art as discussed above do not include reference to any range in thickness for the individual layers or a second polypropylene inner layer. However, in the absence of unexpected results, it would have been obvious to one having ordinary skill in the art at the time of the invention to optimize the thickness of the individual layers and to include an additional polypropylene layer to produce a laminate with the desired properties, ie. gas barrier, water vapor, heat-resistant, flexibility and sealing properties for a desired food packaging article.
- Claims 15-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Misasa et al as applied to claims 15-20, 22, 25, 27 and 29-30 above. The teachings of Misasa et al as discussed above do not include reference to any range in thickness for the individual layers. However, in the absence of unexpected results, it would have been obvious to one skilled in the art at the time of the invention to optimize the thickness of the individual layers to produce a

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laminate with the desired properties, ie. gas barrier, water vapor, heat-resistant, flexibility and sealing properties for a desired food packaging article.

- 24. Claims 15-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al as applied to claims 15-20, 22, 25 and 29-30 above. The teachings of Ito et al as discussed above do not include the entire thickness range for certain layers of the instant claimed invention. However, in the absence of unexpected results, it would have been obvious to one skilled in the art at the time of the invention to optimize the thickness of the individual layers and the number of polypropylene layers to produce a laminate with the desired properties, ie. gas barrier, water vapor, heat-resistant, flexibility and sealing properties for a desired food packaging article.
- The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

26. Claims 15-31 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-6 and 8-10 of copending Application No. 09/457006. Although the conflicting claims are not identical, they are not patentably distinct from each other because it would have been obvious to one having ordinary skill in the art to alternatively utilize polyamide as the first functional layer given it provides equivalent barrier properties to that of a polyester film and to optimize the thickness of the

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individual layers and the number of polypropylene layers to produce a laminate with the desired properties, ie. gas barrier, water vapor, heat-resistant, flexibility and sealing properties for a desired food packaging article. Further, it is noted that lamination, extrusion, coextrusion and coextrusion coating are conventional processing steps in fabricating multilayer laminates and do not change the material composition or structure of the final product composite.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monique R Jackson whose telephone number is 703-308-0428. The examiner can normally be reached on Mondays-Thursdays, 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul J Thibodeau can be reached on 703-308-2367. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-5436 for regular communications and 703-305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

December 3, 2000

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Supervisory Patent Examiner Technology Center 1700